

spirom  
Spirometry Data

<u>NAME</u>	<u>TYPE (LENGTH)</u>	
NEWID	F (5.1)	Patient ID
Baseline Values		
BLFEVA_1	F (5.1)	f25q4: Pre-bronchodilators - FEV-1
BLFVCA	F (5.1)	f25q5: Pre-bronchodilators - FVC
BLFEVPRD	F (5.1)	FEV-1 predicted <sup>1</sup>
BLPERFEV	F (5.1)	FEV-1 % predicted
BLFVCPRD	F (5.1)	FVC predicted <sup>1</sup>
BLPERFVC	F (5.1)	FVC % predicted
BLRATIO1	F (5.1)	FEV-1/FVC (%)
Two-year Values		
FVFEVA_1	F (5.1)	f25q4: Pre-bronchodilators - FEV-1
FVFVCA	F (5.1)	f25q5: Pre-bronchodilators - FVC
FVFEVPRD	F (5.1)	FEV-1 predicted <sup>2</sup>
FVPERFEV	F (5.1)	FEV-1 % predicted
FVFVCPRD	F (5.1)	FVC predicted <sup>1</sup>
FVPERFVC	F (5.1)	FVC % predicted
FVRATIO1	F (5.1)	FEV-1/FVC (%)

---

<sup>1</sup> See Tables 4 and 5 (following this page) for calculation of predicted value

<sup>2</sup> See Tables 4 and 5 (following this page) for calculation of predicted value

**TABLE 4**  
**PREDICTION AND LOWER LIMIT OF NORMAL EQUATIONS FOR**  
**SPIROMETRIC PARAMETERS FOR MALE SUBJECTS\***

Male Subjects	Intercept	Age	Age <sup>2</sup>	Ht <sub>PRD</sub> (cm) <sup>2</sup>	Ht <sub>LLN</sub> (cm) <sup>2</sup>	R <sup>2</sup>
<b>Caucasian &lt; 20 yr of age</b>						
FEV <sub>1</sub>	-0.7453	-0.04106	0.004477	0.00014098	0.00011607	0.8510
FEV <sub>6</sub>	-0.3119	-0.18612	0.009717	0.00018188	0.00015323	0.8692
FVC	-0.2584	-0.20415	0.010133	0.00018642	0.00015695	0.8668
PEF	-0.5962	-0.12357	0.013135	0.00024962	0.00017635	0.7808
FEF <sub>25-75</sub>	-1.0863	0.13939		0.00010345	0.00005294	0.5601
<b>Caucasian ≥ 20 yr of age</b>						
FEV <sub>1</sub>	0.5536	-0.01303	-0.000172	0.00014098	0.00011607	0.8510
FEV <sub>6</sub>	0.1102	-0.00842	-0.000223	0.00018188	0.00015323	0.8692
FVC	-0.1933	0.00064	-0.000269	0.00018642	0.00015695	0.8668
PEF	1.0523	0.08272	-0.001301	0.00024962	0.00017635	0.7808
FEF <sub>25-75</sub>	2.7006	-0.04995		0.00010345	0.00005294	0.5601
<b>African-American &lt; 20 yr of age</b>						
FEV <sub>1</sub>	-0.7048	-0.05711	0.004316	0.00013194	0.00010561	0.8080
FEV <sub>6</sub>	-0.5525	-0.14107	0.007241	0.00016429	0.00013499	0.8297
FVC	-0.4971	-0.15497	0.007701	0.00016643	0.00013670	0.8303
PEF	-0.2684	-0.28016	0.018202	0.00027333	0.00018938	0.7299
FEF <sub>25-75</sub>	-1.1627	0.12314		0.00010461	0.00004819	0.4724
<b>African-American ≥ 20 yr of age</b>						
FEV <sub>1</sub>	0.3411	-0.02309		0.00013194	0.00010561	0.8080
FEV <sub>6</sub>	-0.0547	-0.02114		0.00016429	0.00013499	0.8297
FVC	-0.1517	-0.01821		0.00016643	0.00013670	0.8303
PEF	2.2257	-0.04082		0.00027333	0.00018938	0.7299
FEF <sub>25-75</sub>	2.1477	-0.04238		0.00010461	0.00004819	0.4724
<b>Mexican-American &lt; 20 yr of age</b>						
FEV <sub>1</sub>	-0.8218	-0.04248	0.004291	0.00015104	0.00012670	0.8536
FEV <sub>6</sub>	-0.6646	-0.11270	0.007306	0.00017840	0.00015029	0.8657
FVC	-0.7571	-0.09520	0.006619	0.00017823	0.00014947	0.8641
PEF	-0.9537	-0.19602	0.014497	0.00030243	0.00021833	0.7530
FEF <sub>25-75</sub>	-1.3592	0.10529		0.00014473	0.00009020	0.5482
<b>Mexican-American ≥ 20 yr of age</b>						
FEV <sub>1</sub>	0.6306	-0.02928		0.00015104	0.00012670	0.8536
FEV <sub>6</sub>	0.5757	-0.02860		0.00017840	0.00015029	0.8657
FVC	0.2376	-0.00891	-0.000182	0.00017823	0.00014947	0.8641
PEF	0.0870	0.06580	-0.001195	0.00030243	0.00021833	0.7530
FEF <sub>25-75</sub>	1.7503	-0.05018		0.00014473	0.00009020	0.5482

\* Ht<sub>PRD</sub> coefficient is used for prediction equation and Ht<sub>LLN</sub> is used (replaces Ht<sub>PRD</sub>) for the lower limit of normal equation. Lung function parameter = b<sub>0</sub> + b<sub>1</sub> \* age + b<sub>2</sub> \* age<sup>2</sup> + b<sub>3</sub> \* height<sup>2</sup>.

TABLE 5  
PREDICTION AND LOWER LIMIT OF NORMAL EQUATIONS FOR  
SPIROMETRIC PARAMETERS FOR FEMALE SUBJECTS\*

Female Subjects	Intercept	Age	Age <sup>2</sup>	Ht <sub>PRD</sub> (cm) <sup>2</sup>	Ht <sub>LLN</sub> (cm) <sup>2</sup>	R <sup>2</sup>
<b>Caucasian &lt; 18 yr of age</b>						
FEV <sub>1</sub>	-0.8710	0.06537		0.00011496	0.00009283	0.7494
FEV <sub>6</sub>	-1.1925	0.06544		0.00014395	0.00011827	0.7457
FVC	-1.2082	0.05916		0.00014815	0.00012198	0.7344
PEF	-3.6181	0.60644	-0.016846	0.00018623	0.00012148	0.5559
FEF <sub>25-75</sub>	-2.5284	0.52490	-0.015309	0.00006982	0.00002302	0.5005
<b>Caucasian ≥ 18 yr of age</b>						
FEV <sub>1</sub>	0.4333	-0.00361	-0.000194	0.00011496	0.00009283	0.7494
FEV <sub>6</sub>	-0.1373	0.01317	-0.000352	0.00014395	0.00011827	0.7457
FVC	-0.3560	0.01870	-0.000382	0.00014815	0.00012198	0.7344
PEF	0.9267	0.06929	-0.001031	0.00018623	0.00012148	0.5559
FEF <sub>25-75</sub>	2.3670	-0.01904	-0.000200	0.00006982	0.00002302	0.5005
<b>African-American &lt; 18 yr of age</b>						
FEV <sub>1</sub>	-0.9630	0.05799		0.00010846	0.00008546	0.6687
FEV <sub>6</sub>	-0.6370	-0.04243	0.003508	0.00013497	0.00010848	0.6615
FVC	-0.6166	-0.04687	0.003602	0.00013606	0.00010916	0.6536
PEF	-1.2398	0.16375		0.00019746	0.00012160	0.4736
FEF <sub>25-75</sub>	-2.5379	0.43755	-0.012154	0.00008572	0.00003380	0.3787
<b>African-American ≥ 18 yr of age</b>						
FEV <sub>1</sub>	0.3433	-0.01283	-0.000097	0.00010846	0.00008546	0.6687
FEV <sub>6</sub>	-0.1981	0.00047	-0.000230	0.00013497	0.00010848	0.6615
FVC	-0.3039	0.00536	-0.000265	0.00013606	0.00010916	0.6536
PEF	1.3597	0.03458	-0.000847	0.00019746	0.00012160	0.4736
FEF <sub>25-75</sub>	2.0828	-0.03793		0.00008572	0.00003380	0.3787
<b>Mexican-American &lt; 18 yr of age</b>						
FEV <sub>1</sub>	-0.9641	0.06490		0.00012154	0.00009890	0.7268
FEV <sub>6</sub>	-1.2410	0.07625		0.00014106	0.00011480	0.7208
FVC	-1.2507	0.07501		0.00014246	0.00011570	0.7103
PEF	-3.2549	0.47495	-0.013193	0.00022203	0.00014611	0.4669
FEF <sub>25-75</sub>	-2.1825	0.42451	-0.012415	0.00009610	0.00004594	0.4305
<b>Mexican-American ≥ 18 yr of age</b>						
FEV <sub>1</sub>	0.4529	-0.01178	-0.000113	0.00012154	0.00009890	0.7268
FEV <sub>6</sub>	0.2033	0.00020	-0.000232	0.00014106	0.00011480	0.7208
FVC	0.1210	0.00307	-0.000237	0.00014246	0.00011570	0.7103
PEF	0.2401	0.06174	-0.001023	0.00022203	0.00014611	0.4669
FEF <sub>25-75</sub>	1.7456	-0.01195	-0.000291	0.00009610	0.00004594	0.4305

\* Ht<sub>PRD</sub> coefficient is used for prediction equation and Ht<sub>LLN</sub> is used (replaces Ht<sub>PRD</sub>) for the lower limit of normal equation. Lung function parameter = b<sub>0</sub> + b<sub>1</sub> \* age + b<sub>2</sub> \* age<sup>2</sup> \* b<sub>3</sub> \* height<sup>2</sup>.

Reference for Tables 4 and 5

Hankinson JL, Odencrantz JR and Fedan KB. Spirometric Reference Values from a Sample of the General U.S. Population. Am.J.Resp.Crit.Care.Med. 1999; 159:179-187.